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AUTHOR Willett, Lynn H.
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ABSTRACT

With the increase in institutional research activity and the number of reports resulting therefrom, there is a growing need for better assessments of the impact of such reports. This paper proposes a framework for analysis of institutional research report impact. The three major dimensions identified are: (1) time (short-term, intermediate, and long-term); (2) action (accepted, nonresponse, and rejection); and (3) audience (primary or wirter/user the same, secondary or written for someone else, and tertiary or written for someone else but passed on to and read by a third part). A series of longitudinal case studies is proposed as a means of implementing the procedures described. A Research Impact Gram (RIG) that incorporates all three dimensions is described. The RIG draws on the sociogram techniques developed in the discipline of sociology. While the approach does have limitations, it provides a simple technique for determining the impact of institutional research reports. (DGC)

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ASSESSING IMPACT OF INSTITUTIONAL STUDIES[1]

Lynn H. Willett
Elgin Community College
Elgin, Illinois

The establishment of institutional research offices in colleges and universities has resulted in the dissemination of a large number of applied research studies. In most cases, these studies have been designed in response to local institutional needs and problems. Community needs assessment, graduate follow-up surveys, class size analyses, enrollment projections are among a few of the various types of reports written by institutional research staff. Typically, the internal dissemination of these reports is to selected but varied audiences.

To assess the impact that these studies are having on the various audiences and institutions, a theoretical framework specifically designed for institutional research offices is needed. Report impact, defined as the varied behavioral and attitudinal response outcomes from audiences over a longitudinal time period, should be systematically evaluated as are other institutional outcomes.

No theoretical model has been specifically developed to assess impact of the institutional researcher's report. Elaborate approaches, however, for assessing published research have been developed by researchers in assessing change (e.g., Guba, 1965) and in identifying communication processes (e.g., Lin, 1968). Traditional evaluation strategies, summarized by Worthen and Sanders 1973, focus on either institutional, program, course outcomes, or on processes. These strategies seem to offer little guidance to the institutional researcher in evaluating his report impact.

In an extensive annotated bibliography on the research utilization process, Farr and Pingree, 1970, have identified over 200 relevant articles. Based on this literature, the authors formulated 15 propositions of research utilization.

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The emphasis, however, of the propositions is on the communication process rather than on the assessment of the report's impact. In a study more closely related to the institutional researcher's problems, Steinhoff (1968) used a case study methodology in a public school to assess federally funded project's implementation; however, his focus was on assessing communication strategies rather than report impact.

IMPACT MODEL

Drawing upon communication and decision-making literature, a three-dimensional model was developed to assist researchers in conceptualizing the research study impact process. The model (Figure 1) relates time, action and audience dimensions. The result of these relationships is defined as "institutional study impact." The components of the model are:

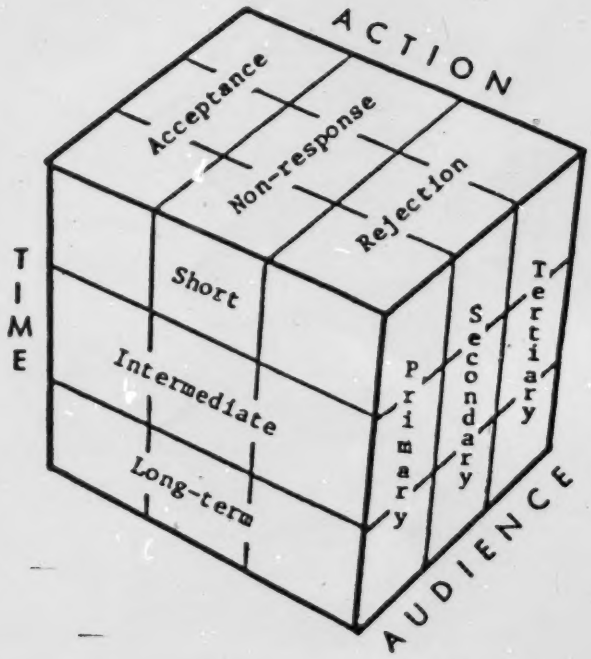
Time -- Van Dalen and Meyer (1966) cite a 25 year lag between dissemination of research studies reported in the literature and their eventual implementation. Within an institution, no comparable time estimate has been made; however, because of the nature of the document being disseminated, a multiple time-frame is advocated. Three time levels are identified: short (from dissemination until three months later), intermediate (from three months until a year later), and long-term (from one year until 5 years).

Action -- Havelock (1973) conceptualizes 6 stages in the process of an individual adopting a new idea. For purposes of a more simplified model, these six stages have been modified and merged into three action phases: "acceptance," where the audience has accepted the report and its findings and then takes an observable action; "non-response" revealed through stalling or delaying tactics, raising questions designed to obscure the findings or simply ignoring the report; "rejection" evidenced by the audience's outright refusal to accept the report's findings or refusal to use the findings in any future actions.

Figure 1

Model For Assessing Impact of

Institutional Studies



Audience -- Farr and Pingree (1970) identify four audiences for educational information - teachers, researchers, administrators and the public. For the proposed model, each of these four audiences at different times can comprise one of the three audience levels in the model. The various audiences are differentiated, not in terms of their traditional institutional roles, but in terms of their locus to the research requesting and disseminating process. The primary phase of the audience dimension represents the requesting individual or group which initiated the study. In many cases this would be the institutional decision-maker to whom the director of institutional research reports. Secondary audiences are persons who routinely receive report copies, persons who immediately report to the primary audience or persons to whom the primary audience reports. The tertiary or third audience level are people within the institution who are not immediately identifiable as report recipients or are not typical users of research report findings.

METHODOLOGY

A longitudinal case study approach is the general research methodology used to implement the model. A variety of criterion measures and data collection instruments are suggested for each time period to insure a reliable assessment of the research impact process.

Short-Term -- to obtain immediate attitudinal feedback from the primary group, a short checklist or rating scale could be used to inquire into the report's adequacy, understandability and relevance. Face-to-face interactions with this group would provide informal initial reactions and suggestions for report clarification. The intermediate audience can be identified from the report dissemination list. This group's attitudes could be solicited through the same rating scale used for the primary group, through a more general rating scale or through a semantic differential. Unobtrusive measures at this time

could be the appearance of administrative memos citing the report, number of people requesting the report and informal, unsolicited feedback. The tertiary audience can only be identified at this time. This can best be done by identifying persons who request the report, or by soliciting the primary and secondary groups to designate those persons with whom they have shared the report.

Intermediate -- more concrete forms of impact can be observed at this stage. Indirect observations of the various audiences will reveal whether the report findings are being acted upon. Typical questions would be: Have the results been referred to a committee? Have the results initiated or contributed to an external funding request? Each audience should be given another opportunity to give attitudinal feedback and to identify additional people who have become aware of the research report.

Long-Term -- in some cases a study may have had its final impact before reaching this time period. Most often, however, the lag between dissemination and implementation will make this phase the most fertile time for a study's impact. Indirect or anecdotal data gathering would be most frequently utilized at this level. Questions which would be helpful during this period of evaluation are: Have any observable changes been made in personnel, equipment, or procedures? Have any additional studies related to original study been requested? Are report copies still being requested?

ANALYSIS

In an effort to provide a comprehensive analysis mechanism, a Research Impact Gram (R.I.G.) has been adapted from the sociologists' sociogram (e.g., Gronlund, 1959). R.I.G. is a comprehensive graphic analysis device which incorporates the time, audience and action dimensions.

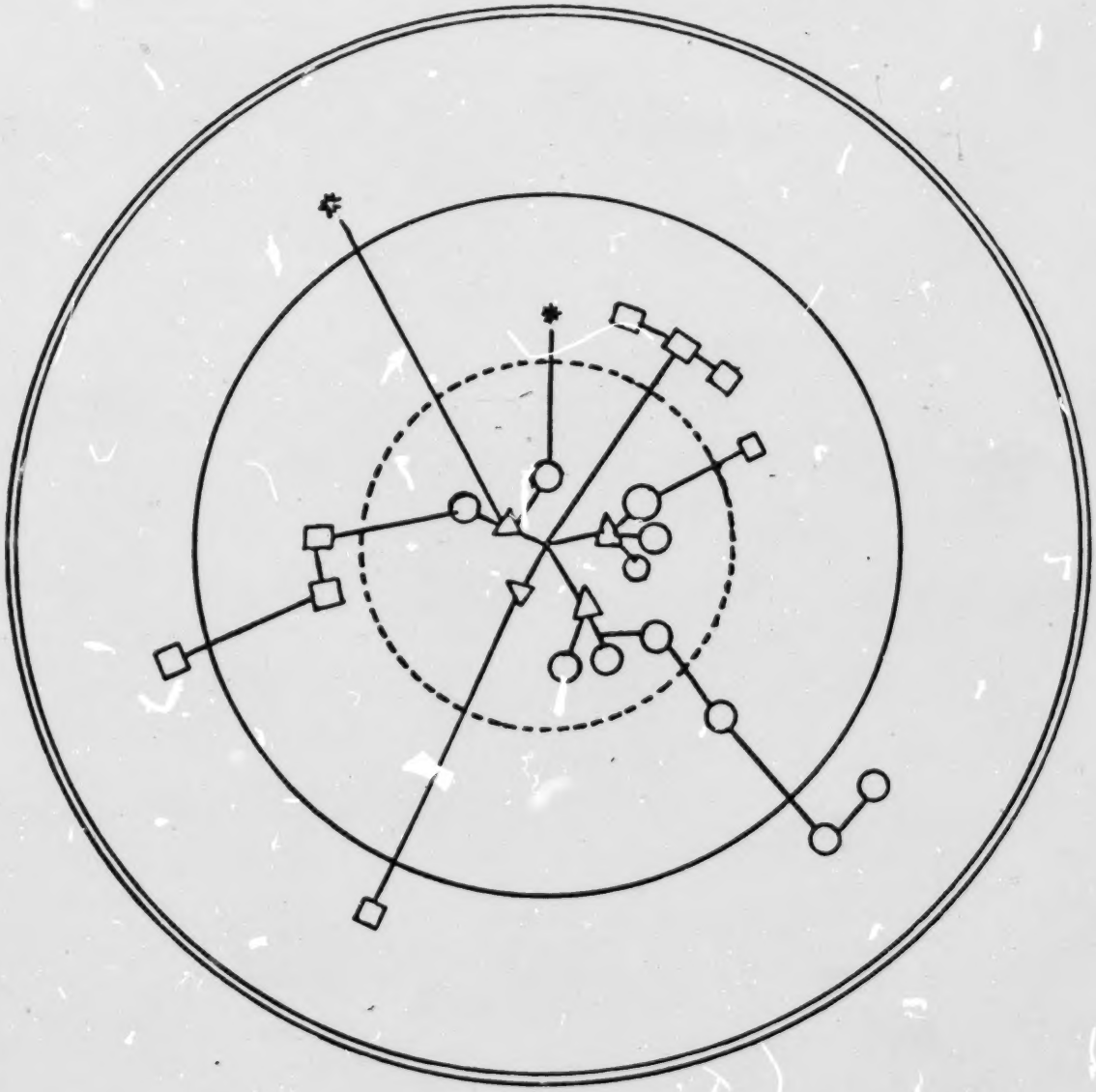
To demonstrate R.I.G.'s potential, hypothetical data are depicted in Figure 2. The center point of the concentric circles represents the day the report is disseminated. Within each of the time circles, the audience types are represented using different character designations. Straight line connections between the characters identify communication links within and between audience types. Asterisks have been superimposed on the audience types when an observable action has occurred. In some cases, observable actions may result in a different time circle than when the audience first received the report. As will often happen in research dissemination, primary and secondary audiences will dominate the early time circles and tertiary audiences will be more abundant within the third time frame.

R.I.G. provides an analysis of the total number of people who were exposed to the study by audience type as well as the observable actions by audience type. Ratio calculations can be determined for the number of persons exposed to the study and the number of actions. Also, R.I.G. can incorporate Halpert's (1966) suggestion that a research utilization index be calculated by dividing the number of units (audiences) applying the results of a particular piece of research by the total number of units capable of applying such results.

The dynamic aspect of the research communication process can be depicted in R.I.G. As audience types are identified, characters are added and the chart expands accordingly. "Report Expansiveness Index" (R.E.I.), a term adapted from sociometric group expansiveness analysis (Kerlinger, 1964), can be calculated by comparing the number of tertiary audiences with their primary and secondary links. Studies with high R.E.I.'s would display large number of tertiary audience types in relation to the primary-secondary audiences. R.E.I. could also be considered a dissemination speed index by calculating the number of tertiary audiences in the short and intermediate circles.

Figure 2

Research Impact Gram



AUDIENCE:

△ = Primary

○ = Secondary

□ = Tertiary

TIME:

◌ = 0 - 3 Months

○ = 3 Months - 1 Year

◎ = 1 - 5 Years

✱ = OBSERVABLE ACTION

In addition to R.I.G. other quantitative measures can focus on comparing attitudinal changes over time by audience type. Also, communication networks can be constructed which will assist in determining dissemination time estimates and communication links (Farr, 1967). Insights into the communication networks (both informal and formal) of an institution can provide the researcher with feedback to guide future disseminations.

Qualitative analysis can focus on the written and verbal feedback pertaining to the report's content and format. Decision-making reactions can be categorized and labelled. These in time can be incorporated into R.I.G.

Several data analysis limitations are inherent in this model. Measures become more unobtrusive as the audience goes from primary to tertiary. Data become less reliable as the time dimension lengthens, and action becomes more difficult to assess when the behavior is either non-responsive or rejecting.

CONCLUSIONS

Because of its simple conceptual framework the model has a number of limitations. The impact process is a complex one involving a wide range of uncontrollable variables which make causal analysis difficult. Organizational features impinge on the report acceptance process, e.g., the formal-informal decision-making processes, commitment to modern management techniques. Human dynamics and communication patterns which are difficult to study present a number of intervening variables. The nature of the report, how well it is written, the topic under consideration, and the extent of its initial dissemination could all influence institutional impact. The nature of the audience in terms of its research sophistication and willingness to read and to use research results should also be considered in measuring report impact.

The model and its implementation would seem to imply a number of future studies. Does the impact of research findings vary directly in relation to the organizational level which requested it? Does the initial action by the primary audience affect the long-term impact of the study? Does the report form influence subsequent decision-making by audience level? Will the proposed evaluation process produce a "Hawthorne effect" which thereby increases the use of research results?

The educational significance of the model is that it provides a simple conceptual framework which can be implemented easily by institutional researchers in determining the impact of their research reports. In this era of accountability the institutional researcher cannot avoid evaluation of one of the major outcomes of his job: the research report.

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